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Amendments to the Drawings:

The attached replacement sheet of drawings includes changes to Fig. 1 and replaces the original sheet including Fig. 1.

Attachments following last page of this Amendment:

Replacement Sheet (1 page)
Annotated Sheet Showing Change(s) (1 page)

REMARKS

Claims 1-76 are pending in action, with claims, 1, 19, 37, and 55 being independent. Claims 4, 7-8, 25-26, 43-44, 55-72, and 76 are amended. No new matter has been added.

The information disclosure statement filed June 2, 2005 is objected to for allegedly failing to comply with 37 CFR 1.98(a)(2) and because the files for the compact disc that was submitted not being in ASCII format.

The drawings are objected to for allegedly failing to provide a brief descriptive label for each numbered item in Figure 1.

Claims 4, 9-11, 27-29, 45-47, and 63-65 are objected to for alleged informalities.

Claims 7-11, 25-29, 43-47, and 61-65 are rejected under 35 U.S.C. 112 for allegedly failing to point out and distinctly claim the subject matter which Applicants regard as the invention.

Claims 55-72 and 76 are rejected under 35 U.S.C. 101 for allegedly being directed to a computer program per se.

Claims 1-76 are rejected under 35 U.S.C. 103 for allegedly being unpatentable over Mahany et al. (USP No. 5,483,676) in view of Yavuz et al. (USP No. 7,075,913).

Applicants respectfully traverse these rejections. Reconsideration and allowance of the above-referenced application is respectfully requested in light of the following remarks.

Information Disclosure Statement

The information disclosure statement filed on June 2, 2005 is objected to for failing to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each reference cited, and for the compact disc that was submitted as not being in ASCII format. In response to this objection, a supplemental information disclosure statement is being filed concurrently herewith. Applicants respectfully request the objection to be withdrawn.

Drawings

The drawings are objected to under 37 CFR Section 1.121(d) as allegedly Fig. 1 not having a brief descriptive label. In response, Applicants have submitted a replacement drawing and respectfully request that this objection be withdrawn.

Claim Objections

Claims 4, 9-11, 27-29, 45-47, and 63-65 are objected to for alleged informalities. Specifically, Examiner alleges that in claims 4, 10-11, 28-29, 46-47, and 64-65 line 2 and claims 9, 27, 45, and 63 lines 5-6, the words "a data rate" seem to refer back to "the data rate" recited in claim 1 line 6. Examiner suggests making an appropriate correction if this is true.

Applicants have amended claim 4 to recite "a data rate." Applicants believe, however, the remainder of Examiner's assertion not to be true. In claims 10-11, 28-29, 46-47, and 64-65, "a data rate" refers to a data rate in its generic sense, in that the data rate is one of many possible data rates that can be selected. Ultimately, "the data rate" recited in claim 1 line 6 is the one of the plural rates that is selected. For example, in claim 10, "selecting the data rate" refers to "the data rate" recited in claim 1 line 6, but "comprises selecting a data rate" refers to a data rate in the generic sense. Furthermore, in claims 9, 27, 45, and 63, "a data rate [j]" refers to data rates, in the generic sense, that are found in a table.

Accordingly, Applicants respectfully request that the objection to claims 4, 9-11, 27-29, 45-47, and 63-65 for alleged informalities be withdrawn.

Section 112 Rejections

Claims 7-11, 25-29, 43-47, and 61-65 are rejected under 35 U.S.C. 112 for allegedly failing to point out and distinctly claim the subject matter which Applicants regard as the invention. Specifically, Examiner asserts that claims 7, 9, 25, 43, and 61 are not clear as to what Δ_{RSSI} value is being claimed. Applicants respectfully disagree. Applicants' disclosure at ¶ [0034] discloses that the Δ_{RSSI} value is an adjustment to the average RSSI value. *See,* ¶ [0034]

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of the specification. Therefore, the Δ_{RSSI} value is an adjustment to the signal quality value comprising an RSSI value. Nevertheless, in an effort to advance prosecution, Applicants have amended claims 7, 25, 43, and 61 to remove any reference to a Δ_{RSSI} value; and amended claims 8, 26, 44, and 62 to recite "wherein the adjustment value comprises a Δ_{RSSI} value, the Δ_{RSSI} value comprising an adjustment to the $RSSI_{avg}$ value."

In view of these amendments, Applicants respectfully request that the rejection to claims 7-8, 25-26, 43-44, and 61-62 under 35 U.S.C. 112 be withdrawn. Claims 9-11, 27-29, 45-47, and 63-65 depend on the aforementioned claims and also are submitted to be allowable for at least the reasons discussed with respect to the aforementioned claims.

Section 101 Rejections

Claims 55-72 and 76 are rejected under 35 U.S.C. 101 for allegedly being directed to non-statutory subject matter because these claims recite a computer program per se. While Applicants believe the claims as presented are directed to statutory subject matter, in an effort to advance prosecution, Applicants have amended these claims to recite a "computer-readable medium" having instructions stored thereon, which, when executed by a processor, causes the processor to perform operations recited in these claims.

Furthermore, Applicants have amended claim 55 to recite the further limitation of "transmitting packets at the data rate." Support for the amendment can be found in Applicants' specification as filed. *See,* e.g., ¶ [0023] of the specification.

In view of these amendments, Applicants respectfully request that the rejections to claims 55-72 and 76 under 35 U.S.C. 101 be withdrawn.

Section 103 Rejections

Claims 1-76 are rejected under 35 U.S.C. 103 for allegedly being unpatentable over Mahany et al. (USP No. 5,483,676), hereinafter "Mahany," in view of Yavuz et al. (USP No. 7,075,913), hereinafter "Yavuz." Applicants respectfully traverse the rejection.

Claim 1 and its dependent claims

Claim 1 recites, in part, selecting a data rate in response to the received signal quality value and the packet loss indicator value.

In the statement of rejection, Examiner asserts that Mahany discloses a method and apparatus comprising steps and means for selecting a data rate in response to the received signal quality value and the data loss indicator value. *See,* page 6, lines 1-12 of Office Action. For at least the reasons set forth below, Applicants respectfully disagree with this characterization.

Mahany discloses using a test transmission at a second data rate and a response to the test transmission to switch over to a second data rate if appropriate (col. 30, lines 45-49 recite send a test transmission at said second data rate; and col. 30, lines 50-54 recite data rate switchover means responsive to an evaluation of said test transmission for automatically selecting either said first data rate or said second data rate of communication). *See also,* col. 2, line 67 to col. 3, line 3 (reciting the base station may insert a test pattern of substantially higher data rate into the polling process, such that upgraded transceiver units can determine the feasibility of use of such higher data rate).

Applicants disclose the inefficiency of using transmissions and acknowledgements, or analogously responses, to step between data rates. *See,* ¶ [0003] of the specification. Alternatively, claim 1 recites selecting a data rate in response to the received signal quality value and the packet loss indicator value. Applicants' claimed method does not require a separate test transmission at a second data rate, i.e., to evaluate and select the second data rate.

Mahany teaches away from Applicants' claimed method by utilizing this inefficient method. Mahany discloses selecting a second data rate only in response to a test transmission transmitted at the second data rate. In effect, a test transmission must be sent for each data rate to be selected. Therefore, Mahany does not teach or suggest Applicants' claimed method that includes selecting a data rate in response to a received signal quality value and a packet loss indicator value.

Yavuz does not cure the deficiencies of Mahany. Yavuz discloses transmitting data at a data rate higher than a supportable data rate (col. 11, lines 28-30 recite determining a serviced

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data rate that is equal to the supportable data rate times the data rate multiplier; and transmitting

data communications from the base station to the wireless subscriber unit at the serviced data

rate). The serviced data rate is used to transmit at a data rate higher than the supportable data

rate, with each data block being transmitted more than one time. *See,* col. 6, lines 1-9. Rather

than selecting a data rate in response to a received signal quality value and a packet loss indicator

value, Yavuz discloses using a higher data rate and retransmitting the data a fixed number of

times. Yavuz neither teaches or suggests selecting a data rate in response to the received signal

quality value and the packet loss indicator value, nor does it disclose determining a packet loss

indicator value from transmitted data.

For at least the foregoing reasons, Applicants respectfully submit that Mahany and

Yavuz, alone or in combination, do not render claim 1 obvious. Claims 2-18 and 73 depend

from claim 1 and also are submitted to be allowable for at least the same reasons set forth above

with respect to claim 1.

Claim 4 is separately allowable for at least the following additional reasons. Claim 4, as

amended, recites, in part, selecting comprises selecting the data rate from a plurality of available

data rates. Again, Mahany only discloses selecting a second data rate in response to a test

transmission transmitted at the second data rate. Only the second data rate can be selected.

Mahany neither teaches nor suggests selecting from a plurality of available data rates. Yavuz

does not cure this deficiency. Rather than selecting a data rate from a plurality of available data

rates, Yavuz only discloses using a higher data rate and retransmitting the data a fixed number of

times.

Claim 5 is separately allowable for at least the following additional reasons. Claim 5

recites, in part, generating a confidence value for each of a plurality of available data rates using

the received signal quality value and the packet loss indicator value. Examiner acknowledges

that Mahany does not disclose this subject matter. Yavuz does not cure this deficiency.

Contrary to Examiner's assertion, Yavuz only discloses that the data rate multiplier is greater

than 1. *See,* abstract. Yavuz does not teach or suggest generating confidence values using a

received signal quality value and a packet loss indicator value. Furthermore, Yavuz discloses a

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single data rate multiplier used to calculate a single serviced data rate. Yavuz does not teach or suggest generating a confidence value for each of a plurality of available data rates.

Claim 6 is separately allowable for at least the following additional reasons. Claim 6 recites, in part, generating an adjustment value for the received signal quality value from the packet loss indicator value. Examiner acknowledges that Mahany does not disclose this subject matter. Yavuz does not cure this deficiency. Contrary to Examiner's assertion, Yavuz only discloses that the data rate multiplier is greater than 1. *See*, abstract. Yavuz does not teach or suggest generating a separate adjustment value from a packet loss indicator value.

Claims 7-13 depend from claims 5 and 6 and also are submitted to be allowable for at least the same reasons set forth above with respect to claims 5 and 6.

Claim 17 is separately allowable for at least the following additional reasons. Claim 17 recites, in part, decreasing comprises decreasing the selected data rate in response to data rate values in a table indexed by available data rates and packet loss indicator values. Mahany does not disclose data rate values in a table, nor the use of such values. Again, Mahany only discloses using a test transmission transmitted at a second data rate. Furthermore, Yavuz does not teach or suggest data rate values in a table indexed by available data rates and packet loss indicator values, nor the use of such values.

Claim 18 is separately allowable for at least the following additional reasons. Claim 18 recites, in part, selecting a second data rate value directly from the packet loss indicator value in response to the received signal quality value falling below a minimum signal level. Mahany does not disclose selecting a second data rate value directly from the packet loss indicator value. Again, Mahany requires the use of a second test transmission and can only select a second data rate based on the second test transmission. Yavuz does not cure this deficiency. Rather than selecting a second data rate value directly from the packet loss indicator value, Yavuz discloses using a higher data rate and retransmitting the data a fixed number of times.

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Claim 19 and its dependent claims

Claim 19 is directed to an apparatus and includes a rate selector operative to select a data rate in response to the received signal quality value and the packet loss indicator value. For at least the same reasons set forth above with respect to claim 1, claim 19 is allowable over the combination of Mahany and Yavuz.

Claims 20-36 and 74 depend from claim 19 and are allowable for at least the same reasons set forth above with respect to claim 19.

Claim 22 is separately allowable for at least the following additional reasons. Claim 22 is directed toward an apparatus and includes a table including a plurality of available data rates. For at least the same reasons set forth above with respect to claim 17, claim 22 is allowable over the combination of Mahany and Yavuz.

Claim 23 is separately allowable for at least the following additional reasons. Claim 23 is directed toward an apparatus and includes a rate selector further operative to generate a confidence value for each of a plurality of available data rates using the received signal quality value and the packet loss indicator value. For at least the same reasons set forth above with respect to claim 5, claim 23 is allowable over the combination of Mahany and Yavuz.

Claim 24 is separately allowable for at least the following additional reasons. Claim 24 is directed toward an apparatus and includes a retry processor operative to generate an adjustment value for the received signal quality value from the packet loss indicator value. For at least the same reasons set forth above with respect to claim 6, claim 24 is allowable over the combination of Mahany and Yavuz.

Claims 25-31 depend from claims 23 and 24 and also are submitted to be allowable for at least the same reasons set forth above with respect to claim 23 and 24.

Claim 35 is separately allowable for at least the following additional reasons. Claim 35 is directed toward an apparatus and includes a table indexed by available data rates and packet loss indicator values. For at least the same reasons set forth above with respect to claim 17, claim 35 is allowable over the combination of Mahany and Yavuz.

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Claim 36 is separately allowable for at least the following additional reasons. Claim 36 is directed toward an apparatus and includes a rate selector further operative to select a second data rate value directly from the packet loss indicator value in response to the received signal quality value falling below a minimum signal level. For at least the same reasons set forth above with respect to claim 18, claim 36 is allowable over the combination of Mahany and Yavuz.

Claim 37 and its dependent claims

Claim 37 is directed to an apparatus and includes means for selecting a data rate in response to the received signal quality value and the packet loss indicator value. For at least the same reasons set forth above with respect to claim 1, claim 37 is allowable over the combination of Mahany and Yavuz.

Claims 38-54 and 75 depend from claim 37 and are allowable for at least the same reasons set forth above with respect to claim 37.

Claim 40 is separately allowable for at least the following additional reasons. Claim 40 is directed toward an apparatus and includes a table including a plurality of available data rates. For at least the same reasons set forth above with respect to claim 17, claim 40 is allowable over the combination of Mahany and Yavuz.

Claim 41 is separately allowable for at least the following additional reasons. Claim 41 is directed toward an apparatus and includes means for generating a confidence value for each of a plurality of available data rates using the received signal quality value and the packet loss indicator value. For at least the same reasons set forth above with respect to claim 5, claim 41 is allowable over the combination of Mahany and Yavuz.

Claim 42 is separately allowable for at least the following additional reasons. Claim 42 is directed toward an apparatus and includes means for generating an adjustment value for the received signal quality value from the packet loss indicator value. For at least the same reasons set forth above with respect to claim 6, claim 42 is allowable over the combination of Mahany and Yavuz.

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Claims 43-49 depend from claims 41 and 42 and also are submitted to be allowable for at least the same reasons set forth above with respect to claims 41 and 42.

Claim 53 is separately allowable for at least the following additional reasons. Claim 53 is directed toward an apparatus and includes a table indexed by available data rates and packet loss indicator values. For at least the same reasons set forth above with respect to claim 17, claim 53 is allowable over the combination of Mahany and Yavuz.

Claim 54 is separately allowable for at least the following additional reasons. Claim 54 is directed toward an apparatus and includes selecting a second data rate value directly from the packet loss indicator value in response to the received signal quality value falling below a minimum signal level. For at least the same reasons set forth above with respect to claim 18, claim 54 is allowable over the combination of Mahany and Yavuz.

Claim 55 and its dependent claims

Claim 55, as amended, is directed to a computer-readable medium and includes selecting a data rate in response to the received signal quality value and the packet loss indicator value. For at least the same reasons set forth above with respect to claim 1, claim 55 is allowable over the combination of Mahany and Yavuz.

Claims 56-72 and 76, as amended, depend from claim 55 and are allowable for at least the same reasons set forth above with respect to claim 55.

Claim 58 is separately allowable for at least the following additional reasons. Claim 58, as amended, is directed toward a computer-readable medium and includes selecting a data rate from a plurality of data rates. For at least the same reasons set forth above with respect to claim 4, claim 58 is allowable over the combination of Mahany and Yavuz.

Claim 59 is separately allowable for at least the following additional reasons. Claim 59, as amended, is directed toward a computer-readable medium and includes generating a confidence value for each of a plurality of available data rates using the received signal quality value and the packet loss indicator value. For at least the same reasons set forth above with respect to claim 5, claim 59 is allowable over the combination of Mahany and Yavuz.

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Claim 60 is separately allowable for at least the following additional reasons. Claim 60, as amended, is directed toward a computer-readable medium and includes generating an adjustment value for the received signal quality value from the packet loss indicator value. For at least the same reasons set forth above with respect to claim 6, claim 60 is allowable over the combination of Mahany and Yavuz.

Claims 61-67 depend from claims 59 and 60 and also are submitted to be allowable for at least the same reasons set forth above with respect to claims 59 and 60.

Claim 71 is separately allowable for at least the following additional reasons. Claim 71, as amended, is directed toward a computer-readable medium and includes a table indexed by available data rates and packet loss indicator values. For at least the same reasons set forth above with respect to claim 17, claim 71 is allowable over the combination of Mahany and Yavuz.

Claim 72 is separately allowable for at least the following additional reasons. Claim 72, as amended, is directed toward a computer-readable medium and includes selecting a second data rate value directly from the packet loss indicator value in response to the received signal quality value falling below a minimum signal level. For at least the same reasons set forth above with respect to claim 18, claim 72 is allowable over the combination of Mahany and Yavuz.

Conclusion

By responding in the foregoing remarks only to particular positions taken by the examiner, the Applicants do not acquiesce with other positions that have not been explicitly addressed. In addition, the Applicants' arguments for the patentability of a claim should not be understood as implying that no other reasons for the patentability of that claim exist.

Applicants respectfully request that all pending claims be allowed. Applicants request an extension of time to file this response to and including Nov. 5, 2007. Please apply any charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: November 1, 2007   /Kirk A. Gottlieb/
                                           Kirk A. Gottlieb
                                           Reg. No. 42,596

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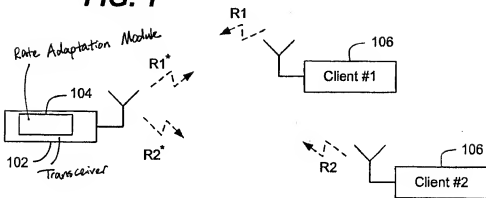Fish & Richardson P.C.
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50446470.doc

FIG. 1

Rate Adaptation Module

R1

R1*

104

102 Transceiver

R2*

R2

106 Client #1

106 Client #2

FIG. 2

Application

Pkts

104 Retry Cntr

216 cntr

202

Rate Adaptation Rate

D C B A BAIL ... A(2) A(1)

TX BB TX RF

205

TX MAC S/W   TX MAC H/W

RSSI

212 214

204

Rx MAC

210

Rx BB

208

Rx RF

206